

AMENDMENTS TO THE CLAIMS

This claim listing replaces all prior versions, and listings, of claims in the application:

1. – 6. (Canceled):

7. (Currently Amended): A control apparatus according to ~~claim 1~~ claim 15, wherein the controller is also configured to compute the amount of torque reduction of the engine when the torque of the engine is reduced, based on a torque transmittable by the transmission and based on a torque input to the transmission.

8. (Currently Amended): A control apparatus according to ~~claim 1~~ claim 15, wherein the controller is also configured to reduce the torque of the engine when the torque input to the transmission exceeds the torque transmittable by the transmission.

9. – 10. (Canceled):

11. (Currently Amended): A control apparatus according to ~~claim 9~~ claim 17, wherein the means for making a selection is configured to compute the amount of torque reduction of the engine when the torque of the engine is reduced, based on a torque transmittable by the transmission and based on a torque input to the transmission.

12. (Currently Amended): A control apparatus according to ~~claim 9~~ claim 17, wherein the means for reducing the torque of the engine is configured to reduce the torque of the engine when the torque input to the transmission exceeds the torque transmittable by the transmission.

13. (Currently Amended): A control method according to ~~claim 10~~ claim 19, wherein the step of making a selection comprises computing the amount of torque reduction of the engine when the torque of the engine is reduced, based on a torque transmittable by the transmission and based on a torque input to the transmission.

14. (Currently Amended): A control method according to ~~claim 10~~ claim 19, wherein the step of reducing the torque of the engine comprises reducing the torque of the engine when the torque input to the transmission exceeds the torque transmittable by the transmission.

15. (New): A control apparatus for a vehicle that is provided with an engine and an automatic transmission connected to the engine, the control apparatus comprising:

a detection device that detects an operating state of the transmission;

a torque regulating mechanism that regulates a torque of the engine; and

a controller that is configured to:

determine whether a rapid torque reduction or a smooth torque reduction is required based on the operating state of the transmission,

perform a first torque reduction control when the rapid torque reduction is required, the first torque reduction control being a control whereby the torque of the engine is reduced rapidly and temporarily by:

(a) an ignition timing delay of the engine, and/or

(b) a reduction of a fuel amount supplied to the engine,

perform a second torque reduction control when the smooth torque reduction is required, the second torque reduction control being a control whereby the torque of the engine is reduced continuously, and more smoothly than in the first torque reduction control by reducing an engine intake air amount, and

when the rapid torque reduction is required and the first torque reduction control is performed, switch to the second torque reduction control from the first torque reduction control, if the first torque reduction control continues for a predetermined period of time.

16. (New): A control apparatus according to claim 15, wherein the switch to the second torque reduction control from the first torque reduction control is configured to prevent damage to an exhaust catalyst.

17. (New): A control apparatus for a vehicle that is provided with an engine and an automatic transmission connected to the engine, the control apparatus comprising:

a detection device that detects an operating state of the transmission;

a torque regulating mechanism that regulates a torque of the engine;

means for determining whether a rapid torque reduction or a smooth torque reduction is required based on the operating state of the transmission;

means for performing a first torque reduction control when the rapid torque reduction is required, the first torque reduction control being a control whereby the torque of the engine is reduced rapidly and temporarily by:

(a) an ignition timing delay of the engine, and/or

(b) a reduction of a fuel amount supplied to the engine;

means for performing a second torque reduction control when the smooth torque reduction is required, the second torque reduction control being a control whereby the torque of the engine is reduced continuously, and more smoothly than in the first torque reduction control by reducing an engine intake air amount; and

means for, when the rapid torque reduction is required and the first torque reduction control is performed, switching to the second torque reduction control from the first torque reduction control, if the first torque reduction control continues for a predetermined period of time.

18. (New): A control apparatus according to claim 17, wherein the switch to the second torque reduction control from the first torque reduction control is configured to prevent damage to an exhaust catalyst.

19. (New): A control method for a vehicle that is provided with an engine, an automatic transmission connected to the engine, a detection device that detects an operating state of the transmission, and a torque regulating mechanism that regulates a torque of the engine, the control method comprising the steps of:

determining whether a rapid torque reduction or a smooth torque reduction is required based on the operating state of the transmission;

performing a first torque reduction control when the rapid torque reduction is required, the first torque reduction control being a control whereby the torque of the engine is reduced rapidly and temporarily by:

(a) an ignition timing delay of the engine, and/or

(b) a reduction of a fuel amount supplied to the engine;

performing a second torque reduction control when the smooth torque reduction is required, the second torque reduction control being a control whereby the torque of the engine is reduced continuously, and more smoothly than in the first torque reduction control by reducing an engine intake air amount; and

when the rapid torque reduction is required and the first torque reduction control is performed, switching to the second torque reduction control from the first torque reduction control, if the first torque reduction control continues for a predetermined period of time.

20. (New): A control method according to claim 19, wherein the switch to the second torque reduction control from the first torque reduction control is configured to prevent damage to an exhaust catalyst.